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Kallström, Agneta

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## Caught in crossfire: health care workers' experiences of violence in Syria

Agneta Kallström <sup>a</sup>, Mikko Häkkinen<sup>b</sup>, Orwa Al-Abdulla<sup>a</sup>,  
Hannu Juusola <sup>c</sup> and Jussi Kauhanen <sup>a</sup>

<sup>a</sup>Laurea University of Applied Sciences, Institute of Public Health and Clinical Nutrition, University of Eastern Finland, Kuopio, Finland; <sup>b</sup>Laurea Institute, Vantaa, Finland; <sup>c</sup>Department of Cultures, Faculty of Arts, Helsinki University, Helsinki, Finland

### ABSTRACT

Health care is attacked in many contemporary conflicts despite the Geneva Conventions. The war in Syria has become notorious for targeted violence against health care. This qualitative study describes health care workers' experiences of violence using semi-structured interviews ( $n = 25$ ) with professionals who have been working in Syria. The participants were selected using a snow-ball sampling method and interviewed in Turkey and Europe between 2016–2017. Analysis was conducted using content analysis. Results revealed that the most destructive and horrific forms of violence health care workers have experienced were committed mostly by the Government of Syria and the Islamic State. Non-state armed groups and Kurdish Forces have also committed acts of violence against health care, though their scope and scale were considered to have a lower mortality. The nature of violence has evolved during the conflict: starting from verbal threats and eventually leading to hospital bombings. Health care workers were not only providers of health care to injured demonstrators, they also participated in non-violent anti-government actions. The international community has not taken action to protect health care in Syria. For health workers finding safe environments in which to deliver health care has been impossible.

**ARTICLE HISTORY** Accepted 19 January 2021

**KEYWORDS** Syria; health care worker; violence; experience; conflict

## 1. Introduction

The Geneva Conventions obligate all parties in the time of war to respect the neutrality of health care. Combatants are required to differentiate between military and civilian objects. Medical professionals may not be punished for treating those in need of help (ICRC 1949, 1977). Despite legal protections, health care has been targeted in many armed conflicts (Briody et al. 2018;

**CONTACT** Agneta Kallström  [agneta.kallstrom@helsinki.fi](mailto:agneta.kallstrom@helsinki.fi)

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Druce et al. 2019; Rubenstein and Bittle 2010; Footer et al. 2014; Lafta and Falah 2019; The Safeguarding Health in Conflict Coalition 2020).

In 2019, attacks against health care were reported in 20 conflict-affected countries. The attacks left 151 health care workers (HCWs) dead. Forms of violence ranged from verbal threats to executions and hospital bombings. Many of the reported attacks took place in Syria (The Safeguarding Health in Conflict Coalition 2020). At the time of writing, the Syrian war has continued for almost a decade and hospital bombings have become a tragic characteristic of the conflict.

The Government of Syria (GoS) and the Government of Russia (GoR) are considered to be responsible for the majority of the deaths (91%) of HCWs. Non-state armed groups (NSAGs) have contributed to the violence to a lesser extent. Over half of the deaths of HWCs were caused by airstrikes and artillery fire. Other identified causes include small arms fire, torture, and executions (Fouad et al. 2018; Physicians for Human Rights 2019).

The estimated number of HCWs killed between 2011 and March 2020 exceeds 923 persons. In addition, more than 350 health care facilities have been attacked (Physicians for Human Rights 2019). These attacks have taken place mostly in NSAG-controlled areas. Roughly half of the hospitals, especially those providing trauma care, were targeted by air strikes – some of them multiple times (Elamein et al. 2017a). By the end of 2019, 25% of public hospitals were reported to be partially functioning and 25% as non-functioning (WHO Regional Office for the Eastern Mediterranean 2019). The majority of qualified HCWs had left the country (Fouad et al. 2018; Physicians for Human Rights 2020). Those HCWs who have stayed in Syria are operating in challenging environments risking their health and psychological well-being (Footer et al. 2018; Fardousi, Douedari, and Howard 2019; Blanchet et al. 2016; Fouad et al. 2018).

Some of the violence against health care appears to have been intentionally targeted. This has raised concerns. In May 2016, the UN Security Council condemned attacks against medical facilities and personnel in the time of conflict (Security Council 2016). It has become increasingly vital to understand the context, motives, and dynamics of what may be intentional attacks against health care. This applies particularly to the Syrian conflict where health care has been repeatedly and according to Fouad et al. (2018) and others intentionally attacked.

Conducting research in conflict settings is challenging for various reasons. These include practical difficulties, including bias in data collection, lack of funding, applicable research methods and terminology (Cohen and Tamar 2011; Patel et al. 2017). A significant knowledge gap exists regarding the nature and extent of violence against health care that appears to be targeted and its impact on HCWs (World Health Organization 2016a). In Syria, research regarding violence against health care, including that which appears to be

targeted has focused on airstrikes against facilities and ambulances. Also the majority of data collected is quantitative.<sup>1</sup> High-profile attacks, such as hospital bombings, gain attention while less destructive and fatal acts, such as threats against HCWs, may go underreported. Only a few qualitative and descriptive studies about HCW experiences in the midst of war exist.<sup>2</sup> However, qualified HCWs play a crucial role in delivering medical assistance for those in need. Without their contribution, the public health system would collapse.

In this research, we describe violence against health care from the perspective of HCWs working in Syria during – at the time of writing – the ongoing conflict. We explore what they have witnessed since the conflict began, their experiences and their thoughts about the different warring parties and their acts of violence. We also study how the changing nature of the conflict has influenced the different forms of violence against HCWs. We don't regard HCWs only as passive subjects of violence, as many of them have had an active role in opposing the President and the Government of Syria. The political role of HCWs during the conflict, especially in the early years, will also be discussed.

## 2. Methods

This qualitative study is based on semi-structured interviews of 25, mostly Syrian, HCWs who worked in Syria after the conflict started in 2011. From June 2016 to December 2017, 18 interviews were conducted near the Syrian border in Gaziantep, Turkey. In addition to this, 7 interviews were conducted in Europe.

### 2.1 Setting

In spring 2011, demonstrations were held against President al-Assad and the Baath party who have held power in Syria since 1963. The GoS can be described as authoritarian and is known for practicing discrimination, torture, and extrajudicial killings (Ziadeh 2013). As unrest spread from the southern city of Daraa across the country, the GoS responded with force. Violence escalated gradually into an armed conflict. The Free Syrian Army (FSA) opposition group was established. We consider this as a starting point of the war. Meanwhile groups with an Islamic background, such as Jabhat al-Nusra (JaN),<sup>3</sup> were gaining power and recruiting fighters in Northern Syria (Lister 2015, p. 83–116).

In spring 2013, a Salafi jihadist organization, Islamic State (IS), emerged in Syria. The organization focused its actions on the northern city of Raqqa and the governorate of Deir ez-Zour. After capturing the city of Mosul in Iraq, IS declared itself a caliphate in north-eastern Syria and western Iraq. In the same year, 2014, the Global Coalition Against Daesh<sup>4</sup> led by the United States (US) began airstrikes against IS with the aim of defeating them (The Global Coalition against Daesh 2020). In 2015 the GoR entered the conflict on the side of the GoS.

According to Russia's Ministry of the Defence, the aim was to target terrorist organizations such as IS and JaN (RT Question More [2015](#)). In March 2016, the Syrian Kurdish Democratic Union Party (PYD) established the Autonomous Administration of North and East Syria (NES), also known as Rojava.

The majority of interviews were conducted in mid-2016 when Syria was geographically fragmented between four main factions:

- (1) The GoS. The Syrian Arab Armed Forces, the armed forces of the Syrian Arab Republic, allied with the GoR. The GoS has also recruited paramilitaries and made pacts with Iranian ground forces and foreign Shi'ite militias (Heller [2016](#)). The term *shabihas* is used in this article to refer to members of pro-government militias.
- (2) NSAGs. Here the term NSAGs is used to refer to a heterogeneous group of organizations from nationalist FSA fighters and moderate Islamist groups to al-Qaeda-aligned jihadists, such as the Hay'at Tahrir al-Sham (HTS). These groups fight against the GoS and some practice military co-operation, although some of them also fight against each other (Heller [2016](#)).
- (3) IS. IS is known as the Salafi jihadist organization and its atrocities against civilians are well known. IS is fighting against all parties in the conflict (Heller [2016](#); Stern and Berger [2015](#)).
- (4) The Syrian Democratic Forces (SDF). SDF is an umbrella term used to refer to several armed groups. SDF is dominated by the Kurdish People's Protection Units (YPG) and its civilian parallel, Democratic Union Party (PYD). These groups are linked to the Kurdistan Workers' Party (PKK). The coalition is backed by the US to fight against IS. SDF is mainly fighting against IS and occasionally the GoS (Heller [2016](#); Uppsala Conflict Data Program UCDP [2015](#)). In this study, we refer to this group as the Kurdish Forces.

Additionally, the Global Coalition against Daesh has participated in the conflict. The US-led coalition includes 83 countries and was formed in September 2014 to defeat IS in Syria and Iraq (The Global Coalition against Daesh [2020](#)).

At the time of writing at the end of the 2020, NSAG-controlled Idlib was the last true stronghold out of GoS control. Also, IS had lost all territories they controlled. In March 2019, the US Administration announced the defeat of IS in Syria and Iraq (The Global Coalition against Daesh [2020](#)).

## 2.2 Study population

Most of the interviews ( $n = 18$ ) were conducted in Gaziantep, a Turkish municipality adjacent to the Syrian border. Interviewing participants in Syria was impossible for security reasons.

Many of those interviewed in Gaziantep lived in Turkey but travelled to Syria regularly to work for different international non-governmental organizations (INGOs) or local organizations the majority of which operated in Aleppo governorate. They typically visited Syria monthly and the duration of their visits ranged from a few days to several weeks.

Those participants who were interviewed in Europe ( $n = 7$ ) had worked as HCWs in Syria during the conflict. This group consisted of Western expatriates and Syrians with refugee or student status or with a visiting visa.

Participants consisted of 21 males and 4 females. Their ages ranged from 26 to 69 years; the median age was 32 years. Of the Syrian participants ( $n = 23$ ), about half ( $n = 12$ ) were born in Aleppo governorate. The other half originated from a variety of other Syrian governorates. One was born abroad in another Middle Eastern country. We reached no interviewees from the governorates of Suwayda, Qunteira, Tartus or Hasakah.

Most of the participants were physicians ( $n = 17$ ). The amount of pre-war health care work experience varied from almost none to 43 years. The demographic characteristics of the interviewees are summarized in [Table 1](#).

### 2.3 Data collection

One female and two male researchers collected semi-structured interview data. Nineteen interviews were conducted in English and six in Arabic.

**Table 1.** Interviewees' demographic information.

Demographics	Number
<b>Interviews</b>	25
<b>Median age</b> (years)	32
<b>Sex distribution</b>	
males	21
females	4
<b>Citizenship</b>	
Syrians	23
Western expatriates	2
<b>Birthplace of the Syrians (governorate)</b>	
Aleppo	12
Raqqqa	2
Deir Ez-Zour	2
Hama	1
Rif Damascus	1
Homs	1
Dara	1
Idlib	1
Abroad (Middle East)	1
<b>Profession</b>	
physicians with a speciality	11
generalist physician + medical student	5 + 1
pharmacists	3
dentist	1
nurses	2
health service managers	2

The open-ended questions were designed to meet two core research goals:

- (1) Identify and describe violence, particularly targeted violence as experienced by HCWs in Syria.
- (2) Identify the perpetrators responsible and/or involved in the violence.

The participants were recruited using a snowball sampling method (SSM). We chose this method because it enables the identification of individuals who avoid publicity or are otherwise hard to find (Atkinson and Flint 2001). The participants required for this research tended to avoid attention due to the sensitive political nature of the topic and the related threat of violence. Only those with an occupation represented in the World Health Organizations' (WHO) classification of the health workforce were included in the study (The World Health Organization n.d.).

The starting point of the first SSM chain was a HCW in Gaziantep, Turkey. This first participant indicated three further possible contacts. Another two SSM chains started in Europe. All three chains developed separately accumulating unrelated interviewees. The interviews continued as long as the participants were able to provide new information.

## 2.4 Data analysis

In this study 'violence' was defined according to the World Health Organization as: The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation (World Health Organization 2002).

Qualitative content analysis was applied using an inductive approach. The interviews were transcribed verbatim. Transliteration coding was then performed and themes relevant to the study were identified. These themes were used to categorize the information present in the interviews and classify the events. The following classification parameters were used: time of attack, object (i.e. type of target), type of attack, assumed perpetrators, place of the incident and results of the attack (see appendix I). The timeline of the violence ranged from before the conflict started in spring 2011 to December 2017.

Only cases where the interviewee or a colleague of theirs had been present were included. Cases were entered in an Excel chart and further analysed by identifying commonalities and differences resulting from the narrative. Even if not all necessary data were present, the descriptions were classified according to the assumed perpetrator and if necessary the estimated time of occurrence to try and understand the nature of the violence and identify possible patterns and underlying strategies.



One of the main purposes of this study was to identify potentially significant qualitative phenomena. Therefore, all interview findings deemed important or interesting by the authors were included in the results regardless of whether they were brought up by multiple interviewees or just one person.

In this article quotations are used to provide evidence and to further illustrate the experiences of the participants. The language in italics has not been corrected in order to preserve its original tone and authenticity. In some cases, details such as names or places have been omitted to protect the participants' identities.

## 2.5 Research ethics

The interviews were recorded with permission from the participants. We elicited no names or any other personal information that could be used to identify the interviewees. We obtained the consent to participate verbally. Participants were informed about the research and its aims and purposes.

An ethical permit for the study was obtained from the University of Eastern Finland's Committee on Research Ethics.

## 3. Results

In the results section we first describe the conditions of Syrian health care workers before 2011 and the escalation of the conflict. Then we proceed to investigate the actions of the GoS against health care at each point of time. Next, we explore the role of other significant factions in the violence. Finally, we describe health care workers' own political role during the conflict.

### 3.1 The Syrian society before conflict

The participants described how HCWs, especially physicians, were respected in Syrian society before the conflict. They did not experience state-based violence due to their profession. However, as citizens, they were subjected to violence by the GoS.

*The majority of Syrians was [experiencing] violence, physical and psychological threats. But as a doctor, there was no violence against me. But as a human, as a Syrian, there was violence. (participant 3)*

The participants described the problems of society, such as corruption and discrimination. Human rights, especially freedom of speech, were severely restricted and challenging authority was considered risky. Some of the participants had been detained and abused for expressing anti-state opinions and taking part in political activism, such as human rights activism. Some thought that abiding by the rules allowed one to avoid consequences from the system. For a submissive citizen, many participants considered Syria to be a relatively good place to live.

*Don't question anything, just do your normal life, your daily work. Don't ask why there is corruption, the institutions, why there is bribery, why this is not working, why they arrested this guy ... Just eat, sleep, buy ...* (participant 5)

### 3.2 Perpetrators and forms of violence

Nearly half of the interviewees had personally experienced direct physical violence after 2011, some of them multiple times. Some had experienced violence from several different perpetrators.

According to the interviewees, all four main factions had committed violence. All participants mentioned the GoS as a perpetrator. Half of the interviewees named IS as responsible for violence, while less than half of the interviewees indicated NSAGs. In some cases, particular NSAGs like FSA, and radical Islamist groups were named. Kurdish forces were mentioned a few times.

*Violence is happening everywhere inside Syria. You see airstrikes and ISIS on the ground, even some FSA is performing sometimes bad behaviour against medical staff. There are very good people inside FSA, but they are still armed group. Everyone inside Syria is practicing violence.* (participant 21)

Those interviewees who had become victims of direct physical violence had been beaten, arrested, imprisoned or tortured or they had been in an ambulance or a health care facility when it was assaulted. They also described the experiences of colleagues that they had heard about or even witnessed. Their colleagues had been arrested, detained, tortured, killed or assaulted while in a health care facility.

*Fortunately, I was not in this time in the hospital. But I came to the hospital [after air strike] and saw, that some of our friends, colleagues being killed.* (participant 22)

### 3.3 Targeted violence against health care by the government of Syria

#### 3.3.1 Health care workers

According to some participants, intentional violence against health care started simultaneously with the unrest that spread across Syria in 2011–2012. Even though the GoS was known for its extensive use of force, some participants had not anticipated such violence.

*[Colleagues] were arrested. We couldn't imagine that they would be killed. It happened in early 2012. In Aleppo there was not much violence, only some gunshots and people run away. Then the regime [the GoS] catch some people and keeps them inside the jail for a month, three months, six months and they go out. But after [colleagues having been arrested and then killed] we knew the regime [the GoS] is targeting health workers.* (participant 22)

Before some health care workers fled from the GoS-controlled areas into FSA-controlled areas, security forces of the GoS had a strong presence at government locations, including hospitals. Members of pro-government

militias, *shabihas*, were monitoring HCWs. *Shabihas* questioned the HCWs' political activities. Also, HCWs' presence at hospitals was carefully monitored.

HCWs treated injured anti-government protestors and, because of the protestors' fear of being caught in state hospitals, secret field hospitals started to emerge in locations such as schools or mosques. Some of the HCWs were called in for home visits.

Those HCWs who were helping demonstrators or supporting the field hospitals were under constant threat of being arrested by the GoS. In some cases, colleagues disappeared or were detained and were sometimes found dead with marks of severe abuse.

*We lost a lot of our colleagues. There was a doctor [name retracted]. They kidnapped him. After 15 days we saw his body and his eyes were taken off. There were other doctors that were killed under detention.* (participant 15)

Those imprisoned were held from a few days up to nine months. They were questioned and occasionally tortured. They witnessed the torture of other prisoners and their inhumane conditions. Those who spent an extended period in jail were in poor condition when released.

*I have seen people been killed, injured. I witnessed death of almost eight people. People got crazy or died or go from craziness to death. This was the most difficult experience of my life. I wasn't tortured. But I was beaten. We were 97 people in a one 22 m<sup>2</sup>. We could not go to toilet. There was no food, no medicine. I lost 13 kilos. I saw death. I was about to die.* (participant 14)

### 3.3.2 Health care facilities and ambulances

As the conflict escalated, the interviewees had to move to opposition-controlled areas to escape the GoS persecution. Still, they gained little respite. A new type of danger to health care emerged: the GoS started airstrikes using mostly barrel and cluster bombs. Participants described how some violence against health care facilities was already present before opposition areas were established but such events were reported to be mostly against hidden field hospitals. Assaults against secret field hospitals were carried out using mortars, shelling and missiles. The participants considered the GoS to be responsible for these actions; however, sometimes, the perpetrator remained unknown.

*We started a field hospital in [name retracted] mosque. We were targeted by helicopters and missiles three times after 20 days.* (participant 18)

Participants described the year 2014 as the barrel bomb period in Aleppo. Barrel bombs are unguided bombs that, by their nature, are inaccurate. Despite or because of this inaccuracy, there were incidents in which barrel bombs struck health care facilities. Some strikes were described as having been conducted on purpose; some were described as accidental. In September 2015 the GoR entered the conflict and brought in more accurate weapons. Participants described airstrikes as more intense and deadlier. They

mentioned that well-known hospitals were damaged or destroyed and not only colleagues, but also patients were killed.

*We call the regime [the GoS] aeroplanes or choppers clumsy or stupid aircraft. They cannot target directly. But the Russians really can target the hospitals. That's why we lost [name retracted] hospital, lost a couple of medical points in [name of the place retracted]. The third hospital was targeted two days ago from the Russians.* (participant 15)

According to the participants, the health care facilities included both well-known, long-established public hospitals and hidden field hospitals. The interviewees believed that the location of official hospitals was known to the GoS and the GoR. Covert field hospitals were located in buildings such as schools or mosques. The residents living near field hospitals were opposed to them because they were afraid that their presence would attract more airstrikes. It was believed that the locations of these targets were known to the GoS or identified during combat and then purposefully attacked, although this cannot be confirmed beyond doubt. Participants mentioned that other civilian infrastructure such as schools, mosques and water stations were bombed.

*We were working in a [name retracted] mosque. We were doing it as a civil hospital, but secretly because no-one should know about it, because it may be destroyed immediately. The injured people were coming to it every day. It was famous, and it was known by all people, all neighbours. Maybe someone told the government that there is a civil hospital here in this mosque, so it was destroyed in an airstrike.* (participant 17)

Airstrikes caused significant loss of human life and varying degrees of structural damage to buildings. Fear of more damaging strikes forced the evacuation of facilities to other places and necessitated moving underground where possible, according to the interviewees. Even if the airstrike missed the facility or caused only minor damage, the risk of structural weakening and potential collapse had to be taken into account. Similarly, undetonated bombs forced the HCWs to evacuate the facility.

*After 3rd attack [airstrike] the building is very fragile. If another attack happens, even it is near to hospital, it may collapse. We are moving in about a month to another hospital. It is close to the area.* (participant 15)

Participants considered airstrikes to be the main threat to health care. They named the GoS and the GoR as responsible for the airstrikes against health care facilities. No participant indicated that the Global Coalition Against Daesh had conducted airstrikes in NSAG-controlled areas or Kurdish territory. They, however, mentioned strikes in IS-controlled areas but had not personally experienced them. Some participants thought that without airstrikes, life could be almost normal in NSAG-controlled areas.

*The air strikes are 90% of the problems. For example, one city inside Syria, when air strikes stopped, only for two, three weeks, you see the life is coming again. People start buying and selling homes, cars, and a market will come*

*again. It will be normal, if there is no air strike in specific area, the life will come again.* (participant 3)

Health care facilities were not the only ones targeted; ambulances were attacked both from the ground and the air causing loss of human life. Some participants described double-tap attacks. These consisted of an initial strike on a target and a secondary bombing after the rescuers had arrived, thus also killing the rescuers. The ambulances were also used for non-medical purposes.

*In [name retracted] neighbourhood bombs were thrown at the building and destroyed. When the civil defence and ambulances went to the place, I was a health worker I was going to the site and I saw how another aircraft targeted people by missile.* (participant 24)

### 3.4 Targeted violence against health care by non-governmental actors

The conflict in Syria gradually fragmented into territories under different warring parties: NSAGs, IS and Kurdish forces. Participants described the situation as chaotic, especially in Aleppo governorate, because of the presence of these many different factions.

*In 2013 Syria started to be divided. In 2014 the radicals came. Then [Syria] was more divided. Then the Kurds came and was more divided. Then ISIS started, and now it's chaos. Total chaos.* (participant 15)

#### 3.4.1 Non-state armed groups

Living and working under NSAGs control was challenging not only because of the airstrikes but also because of war-induced chaos and the resulting power vacuum, which the NSAGs exploited. Some participants described the atmosphere as chaotic and unsafe.

*It's the tension all over. There is a complete security vacuum in these areas. Anyone can come to threaten or blame you for something. Anyone can bring a patient if he is wounded and just put the gun to your forehead and say 'heal him.'* (participant 24)

The attitude towards NSAGs was two-fold: Some participants considered them to be a threat while others tolerated them. NSAGs saw HCWs as an opportunity for monetary gain. Wealthy people, including physicians, were kidnapped for ransom. Participants described how some groups took them to the front line to provide medical services for wounded fighters.

*Some armed groups kidnapped [HCWs] and asked ransoms. Also, [one of NSAGs] tried to force them to serve in the frontline. They tried to kidnap one doctor in front of the hospital, but there were people who came to prevent this.* (participant 24)

Some participants mentioned that NSAGs were involved in acts of arbitrary violence, including arrests, kidnapping and torture. Despite this, participants recounted only one incident in which a HCW was killed by a NSAG.

*Jabhat al-Nusra kidnapped two of our workers. We went to their Sharia court. It was direct threat against us [as an institution], but not personal. (participant 1)*

While some participants viewed NSAGs negatively, others accepted their actions. Some participants said that HCWs were respected as a valuable resource by the NSAGs. For example, among the different NSAGs, JaN/JFS was considered to be a pragmatic organization as HCWs were able to negotiate practical arrangements with the group.

*They respect the doctors that are the only resource that take their treatment. They need doctors so much, so they respect us. (participant 16)*

The NSAGs were Islamist according to some interviewees. Radical Islamists groups such as JFS/JaN/HTS focused on ensuring that HCWs observed religious norms. Some groups interfered with the administering of health care for religious reasons.

*They [JaN] don't have a problem with us. As long as we are providing services. But because they are radicals, they are always focusing upon there are no females with males in the same area. That's the only thing that they are focusing upon. But they [Islamic NSAGs] don't really interfere with our work. (participant 23)*

### 3.4.2 Islamic state

Some participants described conditions in IS-controlled areas. At the time of the interviews, none of the participants were visiting or working in IS-controlled areas. HCWs had been threatened, arrested, kidnapped, or killed by the IS. The organization not only targeted HCWs but other people with higher education or politically sensitive professions, such as journalists, were also under threat. All participants viewed the IS negatively, with great reservation and trepidation.

*They [IS] arrested me. They put a knife on my throat. Those seven hours that they interrogated me was the moment that changed my life. [After being released] People in Raqqa said that this time we got free, next time we won't. (participant 11)*

As the IS gained power and territory, further problems with health care providers started to emerge. Some participants noted the destruction of medical facilities and ambulances as well as the theft of medical equipment. IS forced clinics to close, causing INGOs to withdraw from many areas, thus halting the provision of medical aid. Some HCWs found IS so intimidating that they chose to leave areas where the organization was present or, in some cases, cease operations in Syria completely.

*Beginning of 2015 IS started making problems for all INGOs working in this area. They closed everything, took everything, all the medical equipment. It was very easy for them; they came in and took everything and closed [clinic]. They even arrested some people. (participant 22)*

### 3.4.3 Kurdish forces

Only a few participants mentioned violence by the Kurdish forces. HCWs were arrested in Kurdish-controlled areas, leaving them unwilling to work again.

*It was arresting our medical personnel. Closing the health care facilities but not the hospital. They were arrested because they are working in health sector... After this incidence, [services] continued. You know how it will be after releasing people from jail... they killed their motivation to work. (participant 3)*

Ambulances were shot at on Castello Road which connects Aleppo to Turkey. Those participants who experienced it considered the Kurdish Forces were behind the attack. However, it remains unknown whether the Kurdish Forces shot at the ambulances on purpose.

### 3.5 Health care workers' political role

Some participants described how when the demonstrations started and spread across the country, they and their co-workers supported and participated in the protests. Like the other demonstrators, they were dissatisfied with the GoS and President Bashar al-Assad. Some participants not only participated in the demonstrations but also had an active role in organizing protests in secret groups, for example at the universities. Other political anti-government activities were also described, such as speaking publicly against the GoS and attending political meetings. Some participants were found and arrested because of their actions.

*Some doctors from our groups were arrested. For example, [security forces] came to ask one doctor who wrote to the wall 'down Iranian dog' [refer to President al-Assad]. (participant 11)*

HCWs were suspected to be part of NSAGs. They were stopped at checkpoints and inspected by all warring parties when trying to cross battle lines.

*[Security forces] stopped us at checkpoints in Deir Ez-Zour. We had to get out of the car and give ID. If they noticed that we were doctors, they made a full-scale inspection. They asked in what hospital we are working, are we treating fighters. (participant 11)*

Some participants denied any connection to NSAGs and expressed negative opinions about them. They did not consider their work as health care providers counted as supporting the NSAGs. However, some participants recounted how they were treating injured FSA fighters as well as civilians.

*The judge asked if I have any connections to militias. I am totally against. I am not linked to any militia, and if you are accusing me of delivering aid, I don't see this as a charge because I am against it. I have never done to support the militias. I am not convinced of their movements. I think that the uprising was hijacked by militias. Then things went upside-down. Their agendas are not fine. (participant 16)*

According to those who had been in jail, people were imprisoned for two different reasons: for participating in demonstrations and for treating injured protestors. While in prison, the officials of the GoS questioned HCWs about

their work, colleagues and the location of field hospitals. Also, connections to NSAGs were investigated.

*The air force intelligence arrested me because I tried to help the injured [protestors]. I stayed for six months in jail. The first main reason was because I treated demonstrators and second because I participated in demonstrations. They asked about doctors in field hospitals, those who were treating injured people. Those under the FSA. (participant 1)*

#### 4. Discussion

In this research, we focused on intentional violence against health care. The findings are based on the perspectives of HCWs who had been working in Syria from 2011 to 2017. The study indicates that violence against HCWs started immediately in 2011 when demonstrations were met with violence by the GoS.

During the first years of the conflict, violence consisted of threats, torture and execution by the GoS. Anyone opposing the GoS and its policies was at risk of being imprisoned. The GoS effectively criminalized giving medical aid to injured demonstrators. Belonging to NSAGs is punishable according to Syrian law (Human Rights Council 2013). HCWs found providing any medical aid to demonstrators might be considered to be helping terrorists and therefore they would be considered terrorists themselves. It appears that the detention of HCWs was due to the fact that they were assisting injured demonstrators or had anti-state opinions. Notably, the GoS had been authoritarian even before the conflict. Human rights, such as freedom of speech, were limited. Attacking HCWs who had assisted injured demonstrators or expressed their anti-government views was just an extension of GoS pre-war policies.

As the conflict evolved, the GoS continued ground-based violence against HCWs but also started airstrikes against civilian infrastructure, including health care facilities. The severity of violence reached a peak when the GoR joined the war in September 2015. In June 2016 alone, 18 attacks took place against health care facilities, including many well-known hospitals in NSAG-controlled areas (Physicians for Human Rights 2020).

All parties have committed targeted violence against health care but the scale and scope of violence vary. The GoS and the GoR were the foremost perpetrators of violence. This is in accordance with many reports and studies (Fouad et al. 2018; Physicians for Human Rights 2019; Security Council 2016; Wong and Chen 2018). HCWs also experienced targeted violence by IS, NSAGs and the Kurdish Forces when Syria fragmented between these different factions and lines of battle were formed.

As indicated in previous studies, the working conditions of HCWs were terrible outside of the GoS-controlled areas (Footer et al. 2018; Fardousi, Douedari, and Howard 2019). IS posed a great threat to the HCWs. Working or delivering aid to IS-controlled areas was considered to be very difficult or



even impossible. To protect HCWs, humanitarian organizations chose to withdraw from areas controlled by the organization. Working conditions for HCWs in the IS-declared caliphate have been described in a study carried out in Mosul, Iraq (Michlig et al. 2019). Our findings confirm and underline the horrors that HCWs have experienced under IS control.

Overall NSAGs have committed less severe forms of violence than IS, such as threatening and arresting HCWs. Participants reported an execution carried out by NSAGs. Other sources have also reported abuse and killings (Amnesty International 2015). The Kurdish Forces were mentioned as perpetrators of violence only a few times and only in one case was violence intentional. However, in the literature the Kurdish Forces are known for atrocities against civilians, violations of human rights and abuses (Human Rights Watch 2014; Human Rights Council 2017). The Global Coalition against Daesh have targeted infrastructure to a disproportionate degree considering its impact on the civilian population. (Human Rights Council 2017; Amnesty International 2019). However, the interviewees had experienced no violence on the part of the coalition.

Many HCWs felt that they were in a challenging position and that it was not safe anywhere. The violence against HCWs has led to a situation where professionals have decided to leave Syria (Baker 2014; Cousins 2014) leaving the Syrian population without adequate health care. Morbidity and mortality have risen among the population (Blanchet et al. 2016).

Fouad et al. (2018) suggest that health care has been weaponized; health care has been targeted deliberately and depriving people of health services is used as a strategy of war. Several reports and studies state that the bombing of hospitals and ambulances shows patterns that indicate intent (World Health Organization 2016b; Haar et al. 2018; Ri et al. 2019; Elamein et al. 2017b; Fouad et al. 2018; Physicians for Human Rights 2020).

Our interviews indicate that other relevant infrastructure such as schools, water stations and mosques has also been destroyed. This is in agreement with several reports (Human Rights Watch 2019; Global Coalition to Protect Education from Attack 2018; Human Rights Watch 2020). We propose that the phenomenon of alleged intentional targeting of health care by airstrikes should be considered in a broader context. It is most likely that attacks are made intentionally against health care. However, they may also be part of a larger-scale strategy to destroy non-military infrastructure.

Based on our interviews, it is uncertain whether targeting health care facilities was initially planned or merely collateral damage due to a lack of precision weapons. GoS and GoR were initially informed of the location of official health care facilities, while the locations of unofficial field hospitals were not reported. On the other hand, had there been a coordinated campaign to attack these facilities, it is unlikely that any would have escaped total obliteration. The evidence doesn't seem to support this either. The most likely theory appears to be that some attacks were intentional or at least little attention was paid by the GoS

to protecting these buildings from damage. If health care facilities were damaged due to indiscriminate attacks this is also a violation of the Geneva Conventions.

#### 4.1 Limitations

Our study has limitations, especially concerning data collection. It was limited to HCWs in NSAG-controlled and Kurdish-held areas, geographically mostly in northern Syria. We obtained some information from the IS-controlled regions. We acknowledge that HCWs in the GoS controlled areas face challenges but collecting more detailed information concerning their situation was not within the scope of this study.

The SSM can be criticized because the participants were not selected randomly creating the possibility of selection bias (Kaplan, Korf, and Sterk 1987). To reduce this, we used three parallel SSM networks. Notably less women than men were interviewed. This is mostly due to the fact that male participants named other men as further contacts. Experiences of women HCWs and gender-based violence should be studied in more detail in follow-up studies.

In analysing the data, the participants' strong personal sentiments have to be taken into account. Interviewees may over-emphasize their viewpoints. Practically all participants were opposed to the GoS. Many had actively participated in non-violent anti-government actions, such as participating in or even organizing demonstrations. It remains unknown if any were supporters or members of the NSAGs or had participated in armed combat.

Traumatic experiences as well as personal opinions may influence the objectivity of the narrative. We countered this effect by placing most value on information received from several individual and unrelated participants.

#### 4.2 Strengths

This study also has notable strengths. Collecting data and finding volunteers to interview in conflict settings is challenging due to the sensitivity of the subject matter. Through a qualitative study with semi-structured interviews, it is possible to obtain information that reflects the reasons and chains of events leading up to the acts of violence against health care workers. It seems that less severe forms of harassment, such as verbal threatening, may not even be considered as violence by the victims. Such events often go unreported. However, we consider that such forms of less severe violence can have a substantial impact on HCWs' psychological well-being and on their decision to leave the country.

### 5. Conclusion

This study contributes to the limited literature on the personal experiences of violence against health care in the Syrian conflict. This research gives a voice

to those who worked in the midst of war. Violence against health care workers and health care facilities disrespects medical neutrality and under certain circumstances can constitute a war crime.

The results of this study indicate that the goals and actions of all the armed factions active in the Syrian conflict should be studied to fully appreciate the mechanisms of violence against health care. While preventing high-profile military action such as airstrikes against health care facilities is primarily an international political challenge, it is likely that significant positive results could be reached by influencing the actions of ground-based actors such as IS and JaN.

Examining violence in Syria more comprehensively on all levels, from individual to the large-scale political, would allow the construction of additional models and more effective intervention and protection guidelines for health care in conflict scenarios. Drawing from the experiences of HCWs, a better understanding of the structure of intentional violence may enable the international community to find better solutions to protect health care in the future. In particular hands-on practical-level methods of intervention merit further research.

Health care facilities, among other civilian infrastructure, must be safeguarded. It is paramount to continue to research anti-health care violence, not only in Syria but in all countries that are experiencing armed conflict. It is feasible to hypothesize that events in Syria foreshadow a growing trend in which health care is an increasingly strategic resource and viewed as a valid target of war. In the eye of the conflict, well-functioning health care is vital for the civilians. One participant put it well when they said:

*When hospitals are destroyed, there will be no life. Anyone can live without food for a month, but if there is a bleeding artery, he can't live for more than ten minutes.* (participant 16)

## Notes

1. see for example Wong and Chen (2018); Elamein et al. (2017a).
2. see Footer et al. (2018); Fardousi, Douedari, and Howard (2019).
3. previously also known as Jabhat Fateh al-Sham – JFS, currently known as Hay'at Tahrir al-Sham – HTS.
4. Daesh is an Arabic acronym from initial letters of *al-Dawla al-Islamiya fil Iraq wa al-Sham*, the Islamic State in Iraq and Syria.

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## Notes on contributors

**Agnetta Kallström** (B.A.) is a PhD graduate studying at the University of Eastern Finland, Faculty of Health Sciences, Institute of Public Health and Clinical Nutrition. Her doctoral dissertation is related to violence against health care in Syria.

**Mikko Häkkinen** (PhD) is a Principal Lecturer of Laurea University of Applied Sciences. His doctoral dissertation dealt psychosocial coping in Middle East crisis environment. He has a long experience in mental health promotion education and development in national and international settings.

**Orwa Al-Abdulla** (MSc) is a PhD graduate studying at the University of Eastern Finland, Faculty of Health Sciences, Institute of Public Health and Clinical Nutrition. His doctoral dissertation is related to COVID-19 outbreak in a conflict-affected area, northwest Syria. He has experience in humanitarian coordination and response. Currently, he works for the health cluster in Turkey for the humanitarian response in North West Syria.

**Hannu Juusola** (PhD) is a Professor of Middle Eastern Studies, Department of Cultures, University of Helsinki. He is interested in Modern Middle Eastern societies and politics, citizenship & ethnicity, Israel & Palestine conflict, Lebanon & Syria, religion and politics.

**Jussi Kauhanen** (MD, MPH, PhD) is a Professor of Public Health, Director Institute of Public Health and Clinical Nutrition, University of Eastern Finland. One of his group's current projects, 'Culture, conflicts, and public health', is concerning with the public health implications for people living in conflict areas, or who are affected by humanitarian crises.

## ORCID

Agnetta Kallström  <http://orcid.org/0000-0002-5442-3709>

Hannu Juusola  <http://orcid.org/0000-0003-4216-5148>

Jussi Kauhanen  <http://orcid.org/0000-0003-1426-0199>

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## Appendix I: Classifications and Lists Used

Class	Type
Objects	Health care workers (HCWs): health professionals, health associate professionals, health management and support personnel Health care facilities: public and private hospitals, clinics and field hospitals Ambulances: marked transports
Types of attacks	Threatening Kidnapping, arresting, imprisonment Looting Beating and torture Shooting Killing and executing Car Bombs Artillery fire Airstrikes
Perpetrators	The Government of Syria (GoS) and allies Non-state armed groups (NSAGs) Syrian Democratic Forces (SDF) Islamic State in Syria (IS)
Results of attacks	Material damage: damage to structures of health care facilities Human physical casualties: from minor injuries to death
Syrian governorates	Damascus Rif Damascus Aleppo Hama Latakia Deir ez-Zour Homs Qunteira Daraa Tartus Raqqqa Suwayda Hasaka Idlib